

IN THE CLAIMS:

Please amend the claims as follows:

1. (currently amended) A method of automatically calibrating a loop-filter of a phase locked loop, which loop-filter comprises at least one RC-filter component and is integrated on a single chip together with a calibrating component and with at least one RC-filter component of ~~another~~ an entity other than said phase locked loop and other than said calibrating component, said method comprising tuning said at least one RC-filter component of said loop-filter by means of said calibrating component based on measurements performed on said at least one RC-filter component of said other entity.
2. (original) A method according to claim 1, wherein tuning said at least one RC-filter component of said loop-filter is preceded by measuring an RC-product of said at least one RC-filter component of said other entity and by determining a tuning value for tuning said at least one RC-filter component of said other entity by comparing said measured RC-product with an RC-product known to be required for said at least one RC-filter component of said other entity, and wherein said tuning of said at least one RC-filter component of said loop-filter is based on said determined tuning value.
3. (original) A method according to claim 2, wherein said tuning value is a control word which is applied to said at least one RC-filter component of said loop-filter for tuning said at least one RC-filter component of said loop-filter.
4. (original) A method according to claim 1, wherein tuning said at least one RC-filter component of said loop-filter comprises changing at least the value of a resistor and/or the value of a capacitor of said at least one RC-filter component of said loop-filter.

5. (currently amended) An integrated circuit chip comprising:
 - a loop-filter for a phase locked loop, which loop-filter includes at least one RC-filter component;
 - a calibrating component; and
 - at least one RC-filter component for ~~another~~ an entity other than said phase locked loop[[:]] and other than said calibrating component; and
 - wherein said [[a]] calibrating component is adapted to tune said at least one RC-filter component of said loop-filter based on for performing measurements performed on said at least one RC-filter component for said other entity and for tuning said at least one RC-filter component of said loop-filter based on such measurements.
6. (original) An integrated circuit chip according to claim 5, wherein said calibrating component performs said measurements by measuring an RC-product of said at least one RC-filter component for said other entity, wherein said calibrating component is further designed for determining a tuning value for tuning said at least one RC-filter component for said other entity by comparing a measured RC-product with a RC-product known to be required for said at least one RC-filter component for said other entity, and wherein said calibrating component tunes said at least one RC-filter component of said loop-filter based on said determined tuning value.
7. (original) An integrated circuit chip according to claim 6, wherein said calibrating component determines a control word as said tuning value, and wherein said calibrating component applies a determined control word to said at least one RC-filter component of said loop-filter for tuning said at least one RC-filter component of said loop-filter.

8. (original) An integrated circuit chip according to claim 5, wherein said at least one RC-filter component includes at least one of a tunable resistor and a tunable capacitor, and wherein said calibrating component tunes said at least one RC-filter component of said loop-filter by changing at least the value of said tunable resistor and/or the value of said tunable capacitor of said at least one RC-filter component of said loop-filter.
9. (original) An integrated circuit chip according to claim 5, wherein said other entity is a base-band filter for a transmitter chain of a communication unit.
10. (original) An integrated circuit chip according to claim 5, wherein said other entity is a channel-select filter for a receiver chain of a communication unit.
11. (currently amended) A unit comprising an integrated circuit chip with:
 - a loop-filter for a phase locked loop, which loop-filter includes at least one RC-filter component;
 - a calibrating component; and
 - at least one RC-filter component for ~~another~~ an entity other than said phase locked loop and other than said calibrating component; and
 - wherein said [[a]] calibrating component is adapted to tune said at least one RC-filter component of said loop-filter based on for performing measurements performed on said at least one RC-filter component for said other entity and for tuning said at least one RC-filter component of said loop-filter based on such measurements.
12. (original) A unit according to claim 11, wherein said unit is a communication unit comprising a transmitter chain and a receiver chain, and wherein said other entity is one of a base-band filter for said transmitter chain and a channel-select filter for said receiver chain.